Element Performance Inspection (EPI) Data Collection Tool 1.3.1 Maintenance Program (AW)

Revision#: 14 Revision Date: 06/23/2014

ELEMENT SUMMARY INFORMATION

Scope of Element:

Purpose (operator's responsibility): To ensure the operator's Maintenance Program will support safe and reliable operations.

Objective (FAA oversight responsibility): To determine:

- The effectiveness of the operator's procedures in meeting the desired output of the process,
- If the operator follows its procedures, controls, process measurements, and interfaces, and
- If there were any changes in the personnel identified by the operator as having responsibility and/or authority, for the Maintenance Program.

Specific Instructions:

These questions apply to all persons performing maintenance for the operator regardless of who performs the observed maintenance.

- Review the current Maintenance Program and ensure it is the same as authorized in the operator's current Operations Specifications part "D"
- Review and use the guidance listed for each question to determine the adequacy of the operators process.

Although this DCT discusses the 10 elements of the operator's maintenance program, they are not all covered in-depth. Other DCT's provide the in-depth element specific information for those maintenance program elements when the in-depth information is not covered in this DCT. In addition it will verify outputs associated with:

- Aircraft configuration and parts conformity
- 14 CFR part 121 subpart AA; Continued Airworthiness and Safety Improvements

Related EPIs:

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SUPPLEMENTAL INFORMATION

Regulatory Requirements:

A.061, Use of Electronic Flight Bag

D.072, Aircraft Maintenance - Continuous Airworthiness Maintenance Program (CAMP) Authorization.

D.077, Maintenance Contractual Arrangement Authorization: For Entire Aircraft

D.078, Maintenance Contractual Arrangement Authorization: For Specific Maintenance

D.080, Leased Aircraft Maintenance Program Authorizations: U.S.- Registered Aircraft

D.085, Aircraft Listing

- D.087, Maintenance Program Authorization for Leased Foreign- Registered Aircraft Operated by U.S. Air Carriers
- D.091, Requirements: Air Carrier Maintenance Providers
- D.097, Aging Aircraft Programs
- D.105, Air Carrier Emergency Evacuation Systems (EES) Maintenance Program Requirements
- D.301, Aircraft Network Security Program (ANSP)
- D.485, Aging Airplane Inspection and Records Review
- 39.11, What actions do airworthiness directives require?
- 43.3, Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations
- 43.7, Persons authorized to approve aircraft, airframes, aircraft engines, propellers, appliances, or component parts for return to service after maintenance, preventive maintenance, rebuilding, or alteration.
- 43.13, Performance rules (general).
- 43.16, Airworthiness Limitations
- 91.413, ATC transponder tests and inspections
- 119.43, Certificate holder's duty to maintain operations specifications.
- 119.49, Contents of operations specifications.
- 119.59, Conducting tests and inspections.
- 119.65, Management personnel required for operations conducted under part 121 of this chapter.
- 119.67, Management personnel: Qualifications for operations conducted under part 121 of this chapter.
- 121.105, Servicing and maintenance facilities.
- 121.123, Servicing maintenance facilities.
- 121.133, Preparation.
- 121.135, Manual contents
- 121.153, Aircraft requirements: General.
- 121.309, Emergency equipment.
- 121.344, Digital flight data recorders for transport category airplanes.
- 121.346, Flight data recorders: filtered data
- 121.359, Cockpit voice recorders.
- 121.363, Responsibility for airworthiness.
- 121.365, Maintenance, preventive maintenance, and alteration organization.
- 121.367, Maintenance, preventive maintenance, and alterations programs.
- 121.369, Manual requirements.
- 121.371, Required inspection personnel.
- 121.373, Continuing analysis and surveillance.
- 121.374, Continuous airworthiness maintenance program (CAMP) for two-engine ETOPS
- 121.375, Maintenance and preventive maintenance training program.
- 121.378, Certificate requirements.
- 121.379, Authority to perform and approve maintenance, preventive maintenance, and alterations.
- 121.380, Maintenance recording requirements.
- 121.701, Maintenance log: Aircraft.
- 121.709, Airworthiness release or aircraft log entry.
- 121.1105, Aging airplane inspections and records reviews.
- 121.1107, Repairs assessment for pressurized fuselages
- 121.1109, Supplemental inspections
- 121.1111, Electrical Wiring Interconnection Systems (EWIS) maintenance program.
- 121.1113, Fuel tank system maintenance program
- 121.1117, Flammability reduction means
- 121. Appendix B, Aircraft Flight Recorder Specifications
- 121. Appendix M, Airplane Flight Recorder Specifications
- 121.344a, Digital flight data recorders for 10-19 seat airplanes

Related CFRs & FAA Policy/Guidance:

Related CFRs:

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FAA Policy/Guidance:

FAA Order 8300.13, Repair Assessment Program

FAA Order 8900.1, Volume 3, Chapter 18, Section 6

FAA Order 8900.1, Volume 3, Chapter 43, Section 1

FAA Order 8900.1, Volume 3, Chapter 45, Section 1

FAA Order 8900.1, Volume 3, Chapter 61, Section 1

FAA Order 8900.1, Volume 4, Chapter 6, Section 4

FAA Order 8900.1, Volume 4, Chapter 14, Section 8

FAA Order 8900.1, Volume 4, Chapter 14, Section

FAA Order 8900.1, Volume 6, Chapter 2, Section 28

FAA Order 8900.1, Volume 6, Chapter 2, Section 38

FAA Order 8900.1, Volume 6, Chapter 11, Section 14

FAA Order 8900.1, Volume 6, Chapter 11, Section 23

FAA Order 8900.1, Volume 6, Chapter 11, Section 24

FAA Order 8900.1, Volume 6, Chapter 11, Section 26

FAA Order 8900.1, Volume 10, Chapter 6, Section 3

AC 20-131, Airworthiness Approval of TCAS/Mode S Transponders

AC 20-141, Airworthiness and Operational Approval of DFDR Sys.

AC 25-29, Development of a Nondestructive Inspection Program/Organization

AC 25.571-1, Damage Tolerance and Fatigue Evaluation of Structure

AC 43-6, Alt. Report Equip. and Transponder System MX and Insp.

AC 91-56, Continuing Structural Integrity Program for Airplanes

AC 120-16, Air Carrier Maintenance Programs

AC 120-79, Developing and Implementing a CASS

AC 120-97, Incorporation of FTS ICA into Operator MX. Program

AC 120-98, Incorporation of Fuel Tank FRM Requirements

AC 120-102, Incorporation of EWIS ICA into Operator MX Program

PS-ANM100-1986-00055, Primary Structural Integrity Limits in AC.

PS-ANM100-1989-00048, Mod and Repairs Impact on Damage Tolerance

PS-ANM100-1993-00047, Fail-safe Damage Tolerance Features

InFO 10016, Datalink Communications Recording Requirements

EPI SECTION 1 - PERFORMANCE OBSERVABLES

Objective:

The tasks and questions in this section of the EPI are designed to assist in determining if the operator follows its written procedures and controls and meets the established performance measures of the process. The initial series of questions address the output(s) of the process and the last several questions address whether or not various aspects of the process were followed.

Tasl	ks
	The inspector shall accomplish the following tasks:
1	Review the information listed in the Supplemental Information Section of this DCT.
2	Review policies, procedures, instructions, and information for this element.
3	Review the most recently accomplished Safety Attribute Inspection (SAI) for this element.
4	Observe the performance of this element to gain an understanding of the procedures, instructions, and information.
5	Discuss this element with the personnel who perform the duties and responsibilities required by the process.

Ques	tions	
1.1	Did observed personnel understand their assigned organizational authority and responsibilities before they performed their duties? Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	Yes No, Explain Not Observable
1.2	Regardless of who performed the observed maintenance activity, were the operator's maintenance manual procedures/instructions adequate to ensure the continued airworthiness of the aircraft or parts thereof being maintained? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Observable
1.3	Regardless of where the aircraft was located or who performed the maintenance; did the operator's organization maintain control over the maintenance being performed? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	Yes No, Explain Not Observable
1.4	Was the operator's Continuing Analysis and Surveillance (CASS) system monitoring the performance and effectiveness of the observed maintenance program activity? Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes☐ No, Explain☐ Not Observable
1.5	Did the maintenance schedule record show that the correct task(s) was accomplished at the correct scheduled interval?	☐ Yes ☐ No, Explain ☐ Not Observable

	Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
	Related Performance JTIs:	
	 Verify that no person has described in any required maintenance entry or form of an aircraft airframe, engine, componant part, an if applicable propeller as being overhauled unless it meets the requirements of 14 CFR part 43.2(a). 	
	Sources: 43.2(a)(1); 43.2(a)(2)	
	 Verify that no person has described in any required maintenance entry or form of an aircraft airframe, engine, componant part, and if applicable propeller as being rebuilt unless it meets 14 CFR part 43.2(b). 	
	Sources: 43.2(b)	
1.6	Did observed personnel have current manuals available to them applicable for the work being conducted?	Yes No, Explain Not Observable
	Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
1.7	Was the observed maintenance provider capable, qualified, and authorized to perform the specific work before they perform the work?	Yes No, Explain Not Observable
	Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
1.8	Did the operator ensure the observed maintenance or alteration work card task identified what work was to be accomplished, how the work was to be accomplished, and that the work was accomplished accurately?	Yes No, Explain Not Observable
	Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
1.9	Was unscheduled maintenance recorded?	Yes No, Explain Not Observable
	Updated: Rev # 4 on 12/03/2009 Kind Of Question: Flag, Supplemental, Domestic	
	Related Performance JTIs:	
	 Check at the air carrier operated maintenance facility or outsource provider that all required inspections (RII) are performed. 	
	Sources: 121.369(b)(6)	
1.10	Was the operator's maintenance program used to perform maintenance, preventive maintenance, and alterations of airframes and parts thereof?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated: Rev # 4 on 12/03/2009 Kind Of Question: Flag, Supplemental, Domestic	
	Related Performance JTIs:	

	1.	Check at the aircraft to observe if maintenance personnel are using the methods, techniques, and practices prescribed in the Certificate Holder's manual.	
		Sources: 43.13(c); 121.367(c)	
	2.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft using a contractors approved Continuous Maintenance Program, check at the outsource provider that all maintenance performed including structural inspection, power plant shop maintenance, and aircraft component shop maintenance in accordance with the contractor's methods, standards, and procedures.	
		Sources: D.077; D.077i	
	3.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft and are limited to the specific maintenance functions, check at the aircraft that all maintenance accomplished under this authorization is in accordance with the contractor's approved Maintenance Program.	
		Sources: D.078a	
	4.	If the Certificate Holder is authorized to maintain leased foreign- registered aircraft listed in the Operation Specification, check at the air carrier operated maintenance facility and ensure the weight and balance control is accomplished in accordance with the Certificate Holder's approved weight and balance program.	
		Sources: D.087g	
	5.	Check at the air carrier operated maintenance facility or outsource provider that all required inspections (RII) are performed.	
		Sources: 121.369(b)(6)	
1.11		operator's maintenance program used to perform maintenance, ve maintenance, and alterations of aircraft engines and parts thereof?	Yes No, Explain Not Observable
		l: Rev # 4 on 12/03/2009 Question: Flag, Supplemental, Domestic	
	Related	Performance JTIs:	
	1.	Check at the aircraft to observe if maintenance personnel are using the methods, techniques, and practices prescribed in the Certificate Holder's manual.	
		Sources: 43.13(c); 121.367(c)	
	2.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft using a contractors approved Continuous Maintenance Program, check at the outsource provider that all maintenance performed including structural inspection, power plant shop maintenance, and aircraft component shop maintenance in accordance with the contractor's	

		methods, standards, and procedures.	
		Sources: D.077; D.077i	
	3.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft and are limited to the specific maintenance functions, check at the aircraft that all maintenance accomplished under this authorization is in accordance with the contractor's approved Maintenance Program.	
		Sources: D.078a	
	4.	If the Certificate Holder is authorized to maintain leased foreign- registered aircraft listed in the Operation Specification, check at the air carrier operated maintenance facility and ensure the weight and balance control is accomplished in accordance with the Certificate Holder's approved weight and balance program.	
		Sources: D.087g	
	5.	Check at the air carrier operated maintenance facility or outsource provider that all required inspections (RII) are performed.	
		Sources: 121.369(b)(6)	
1.12		operator's maintenance program used to perform maintenance, ve maintenance, and alterations of propellers and parts thereof?	Yes No, Explain Not Applicable
		: Rev # 4 on 12/03/2009 Question: Flag, Supplemental, Domestic	☐ Not Observable
	Related	Performance JTIs:	
	1.	Check at the aircraft to observe if maintenance personnel are using the methods, techniques, and practices prescribed in the Certificate Holder's manual.	
		Sources: 43.13(c); 121.367(c)	
	2.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft using a contractors approved Continuous Maintenance Program, check at the outsource provider that all maintenance performed including structural inspection, power plant shop maintenance, and aircraft component shop maintenance in accordance with the contractor's methods, standards, and procedures.	
		Sources: D.077; D.077i	
	3.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft and are limited to the specific maintenance functions, check at the aircraft that all maintenance accomplished under this authorization is in accordance with the contractor's approved Maintenance Program.	
		Sources: D.078a	
	4.	If the Certificate Holder is authorized to maintain leased foreign-	

		registered aircraft listed in the Operation Specification, check at the air carrier operated maintenance facility and ensure the weight and balance control is accomplished in accordance with the Certificate Holder's approved weight and balance program. Sources: D.087g	
	5.	Check at the air carrier operated maintenance facility or outsource provider that all required inspections (RII) are performed.	
		Sources: 121.369(b)(6)	
1.13		operator's maintenance program used to perform maintenance, ve maintenance, and alterations of appliances and parts thereof?	Yes No, Explain Not Observable
		: Rev # 4 on 12/03/2009 Question: Flag, Supplemental, Domestic	
	Related	Performance JTIs:	
	1.	Check at the aircraft to observe if maintenance personnel are using the methods, techniques, and practices prescribed in the Certificate Holder's manual.	
		Sources: 43.13(c); 121.367(c)	
	2.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft using a contractors approved Continuous Maintenance Program, check at the outsource provider that all maintenance performed including structural inspection, power plant shop maintenance, and aircraft component shop maintenance in accordance with the contractor's methods, standards, and procedures.	
		Sources: D.077; D.077i	
	3.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft and are limited to the specific maintenance functions, check at the aircraft that all maintenance accomplished under this authorization is in accordance with the contractor's approved Maintenance Program.	
		Sources: D.078a	
	4.	If the Certificate Holder is authorized to maintain leased foreign- registered aircraft listed in the Operation Specification, check at the air carrier operated maintenance facility and ensure the weight and balance control is accomplished in accordance with the Certificate Holder's approved weight and balance program.	
		Sources: D.087g	
	5.	Check at the air carrier operated maintenance facility or outsource provider that all required inspections (RII) are performed.	
		Sources: 121.369(b)(6)	
1.14	Did the o	operator"s Emergency Evacuation Systems (EES) Maintenance	Yes

		Requirements ensure the continued serviceability and immediate s for the intended emergency purpose?	☐ No, Explain☐ Not Observable
	•	: Rev # 14 on 06/23/2014 Question: Flag, Supplemental, Domestic	
	Related	Performance JTIs:	
	1.	Check at the aircraft to observe if maintenance personnel are using the methods, techniques, and practices prescribed in the Certificate Holder's manual.	
		Sources: 43.13(c); 121.367(c)	
	2.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft using a contractors approved Continuous Maintenance Program, check at the outsource provider that all maintenance performed including structural inspection, power plant shop maintenance, and aircraft component shop maintenance in accordance with the contractor's methods, standards, and procedures.	
		Sources: D.077; D.077i	
	3.	If the operator is authorized and uses the provisions of a contractual agreement for the maintenance of the operator's aircraft and are limited to the specific maintenance functions, check at the aircraft that all maintenance accomplished under this authorization is in accordance with the contractor's approved Maintenance Program.	
		Sources: D.078a	
	4.	If the Certificate Holder is authorized to maintain leased foreign- registered aircraft listed in the Operation Specification, check at the air carrier operated maintenance facility and ensure the weight and balance control is accomplished in accordance with the Certificate Holder's approved weight and balance program.	
		Sources: D.087g	
	5.	Check at the air carrier operated maintenance facility or outsource provider that all required inspections (RII) are performed.	
		Sources: 121.369(b)(6)	
1.15	Did the ominor?	perator accurately classify repairs and alterations as either major or	Yes No, Explain Not Observable
		: Rev # 9 on 09/01/2011 Question: Flag, Supplemental, Domestic	
1.16		erved personnel use applicable work cards to accomplish maintenance rations tasks?	Yes No, Explain Not Observable
		: Rev # 9 on 09/01/2011 Question: Flag, Supplemental, Domestic	
1.17	Did the o	operator use acceptable or approved technical data when performing	Yes

	maintenance, preventive maintenance or alterations?	☐ No, Explain☐ Not Observable
	Note(s): Additional guidance may be found in FAA Order 8900.1, Volume 3, Chapter 36, Section 1. Major Repairs and Alterations must be done in accordance with FAA approved technical data. Additional guidance may be found in FAA Order 8900.1, Volume 4, Chapter 9, Section 1.	
	Updated: Rev # 9 on 09/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
1.18	Was the person who approved operator developed maintenance technical data authorized to do so?	Yes No, Explain Not Observable
	Note(s): Additional guidance may be found in FAA Order 8900.1, Volume 3, Chapter 36, Section 1. Major Repairs and Alterations must be done in accordance with FAA approved technical data. Additional guidance may be found in FAA Order 8900.1, Volume 4, Chapter 9, Section 1.	
	Updated: Rev # 6 on 06/01/2010 Kind Of Question: Flag, Supplemental, Domestic	
1.19	 Did the operator's recordkeeping system ensure the aircraft records: Were prepared, Were retained, Were completed, and Accurately reflected the status of the U.S. Standard Airworthiness certificate? 	☐ Yes☐ No, Explain☐ Not Observable
	Updated: Rev # 11 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	
1.20	Did the operator follow their Non-Destructive Inspection (NDI) program? Note(s): A robust system should include the following five major elements:	Yes No, Explain Not Observable
	 Organizational Chart, Documentation Requirements, Environment (which includes the facility), Calibration Program, and Training/Qualification/Authorization. 	
	Updated: Rev # 14 on 06/23/2014 Kind Of Question: Flag, Supplemental, Domestic	
1.21	During shift change, did personnel relay the status of work in progress to the oncoming shift?	Yes No, Explain Not Observable
	Updated: Rev # 5 on 03/03/2010	

	Kind Of C	Question: Flag, Supplemental, Domestic	
	Related I	Performance JTIs:	
		Check at the Aircraft during a shift change, that work that is not completed as a result of the shift change or similar work interruption completes a turnover document to ensure that the exact status of all phases of "maintenance in progress" is accurately transferred between shifts in accordance with the Certificate Holder's design.	
		Sources: 121.369(b)(9)	
		Check at the Air Carrier Operated Maintenance Facility during a shift change, that work that is not completed as a result of the shift change or similar work interruption completes a turnover document to ensure that the exact status of all phases of "maintenance in progress" is accurately transferred between shifts in accordance with the Certificate Holder's design.	
		Sources: 121.369(b)(9)	
		Check at the Outsource Provider during a shift change, that work that is not completed as a result of the shift change or similar work interruption completes turnover document to ensure that the exact status of all phases of "maintenance in progress" is accurately transferred between shifts in accordance with the Certificate Holder's design.	
		Sources: 121.369(b)(9)	
1.22		rsonnel who performed the observed maintenance trained, qualified, ed, and listed to do so?	Yes No, Explain Not Observable
		Rev # 3 on 09/15/2009 Question: Flag, Supplemental, Domestic	
1.23		sonnel who use or performed maintenance on the Electronic Flight Bag ined, qualified, and authorized to do so by the operator?	Yes No, Explain Not Applicable Not Observable
	Updated: Kind Of C	Rev # 12 on 03/01/2013 Question: Flag, Supplemental, Domestic	
1.24	Were the guideline	observed required inspection functions conducted per the operator's s?	☐ Yes ☐ No, Explain ☐ Not Observable
		Rev # 9 on 09/01/2011 Question: Flag, Supplemental, Domestic	
1.25		sonnel who determined the adequacy of the observed maintenance qualified, authorized, and listed to do so?	☐ Yes ☐ No, Explain ☐ Not Observable
		Rev # 9 on 09/01/2011 Question: Flag, Supplemental, Domestic	
1.26		ntenance performed by other persons done in accordance with the s described by the operator?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated:	Rev # 3 on 09/15/2009	

	Kind Of Question: Flag, Supplemental, Domestic	
1.27	Was the aircraft appropriately returned to service after maintenance was performed?	Yes No, Explain Not Observable
	Note(s): An Airworthiness Release Form or log entry is used to return the aircraft to service.	
	The following four certifications are required prior to issuing a return to service:	
	 The work was performed in accordance with the requirements of the manual, 	
	 All items required to be inspected were inspected by an authorized person who determined the work was satisfactorily completed, No known condition exists that would make the aircraft non-airworthy, So far as the work is concerned the aircraft is in conditions for safe operation. 	
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
1.28	Were the facilities and equipment adequate for the maintenance being performed?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.29	Were aircraft listed on D085 evaluated to ensure their airworthiness prior to revenue service?	☐ Yes ☐ No, Explain ☐ Not Observable
	Note(s): Use FAA Order 8900.1 Volume 10, Chapter 6, Section 3, along with the reference Federal Aviation Administration (FAA) regulatory and advisory guidance, as a guide for evaluating aircraft configuration with Title 14 of the Code of Federal Regulations (14 CFR). The aircraft listing may also contain the operator's aircraft that are not in revenue service. This includes, but is not limited to, aircraft that are undergoing heavy maintenance, in storage, awaiting parts, newly purchased, or in STC maintenance. However, the operator must have procedures specifying how these aircraft are handled. This applies to 14 CFR parts 121 operators regardless of the "kind of operations" conducted. Foreign registered aircraft records must show the aircraft meets the foreign certifying country's continuing airworthiness maintenance requirements.	
	Updated: Rev # 4 on 12/03/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.30	Did the operator ensure that the airworthiness status could be determined for aircraft stored in a known state of preservation before the aircraft was returned to operational status?	Yes No, Explain Not Applicable Not Observable
	Updated: Rev # 8 on 06/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
	Related Performance JTIs:	

1.31	The operator must ensure stored aircraft are in a known state of preservation through documented methods, techniques, and procedures to effectively determine the airworthiness status before the aircraft is placed back into operations. Sources: 121.135; 121.367; 121.369; FAA Order 8900.1, Volume 6, Chapter 2, Section 38 During observed maintenance did the operator use approved parts?	☐ Yes
1.01	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	☐ No, Explain ☐ Not Observable
1.32	Were procedures for aircraft cleaning followed? (e.g., cleaning of seat cushion covers, carpet, etc including materials used for cleaning and flame-proofing materials after dry cleaning)? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic Related Performance JTIs: 1. Check at the air carrier aircraft and ensure the instructions and information for aircraft cleaning, including materials used for cleaning and flame proofing materials after dry cleaning (Ref. 14 CFR part 43.13, are of enough scope and detail to safely accomplish the task). Sources: FAA Order 8900.1, Volume 3, Chapter 32, Section 11	Yes No, Explain Not Observable
1.33	Did aircraft identified in 14 CFR part 121.1105 being used in revenue service meet the aging aircraft requirements? Note(s): The operator must notify the Administrator that the records and aircraft will be made available for inspection and records review no less than 60 days prior their availability. If an aircraft has passed the date specified in 14 CFR part 121.1105, it may not operate until the Administrator has completed the aging airplane inspection and records review. Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable ☐ Not Observable
1.34	Did the operator perform FAA approved structural integrity assessments of repairs to the fuselage pressure boundary (including fuselage skin, door skin, and bulkhead webs)? Updated: Rev # 8 on 06/01/2011 Kind Of Question: Flag, Supplemental, Domestic Related Performance JTIs: 1. If the Certificate Holder operates Airbus model A300- (excluding the -600 series), and the airplane has reached the flight cycle implementation time of (for model B2 36,000flights), and (for model B4-100 and B4-2C, 30,000 flights above the window line and 36,000 flights below the window line), and (for model B4-200, 25500 flights	Yes No, Explain Not Applicable Not Observable

above the window line and 34,000 flights below the window line), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

Sources: 121.1107(a)(1)(i); 121.1107(a)(1)(ii); 121.1107(a)(1)(iii)

 If the Certificate Holder operates British Aerospace Model BAC 1-11, and the airplane has reached the flight cycle implementation time of 60,000 flights (For all models of the British Aerospace BAC 1-11), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

Sources: 121.1107(a)(2)

3. If the Certificate Holder operates Boeing Model 707, and the airplane has reached the flight cycle implementation time of (For all models of the Boeing 707, the flight cycle implementation time of 15,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

Sources: 121.1107(a)(3)

4. If the Certificate Holder operates Boeing Model 720 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the Boeing 720, the flight cycle implementation time is 23,000 flights.), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

Sources: 121.1107(a)(4)

5. If the Certificate Holder operates Boeing Model 727 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the Boeing 727, the flight cycle implementation time is 45,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

Sources: 121.1107(a)(5)

6. If the Certificate Holder operates Boeing Model 737 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the Boeing 737, the flight cycle implementation time is 60,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

Sources: 121.1107(a)(6)

7. If the Certificate Holder operates Boeing Model 747 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the Boeing 747, the flight cycle implementation time is 15,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.

		Sources: 121.1107(a)(7)	
	8.	If the Certificate Holder operates McDonnell Douglas Model DC-8, airplanes and the airplane has reached the flight cycle implementation time of (For all models of the McDonnell Douglas DC-8, the flight cycle implementation time is 30,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.	
		Sources: 121.1107(a)(8)	
	9.	If the Certificate Holder operates McDonnell Douglas Model DC-9/MD-80 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the McDonnell Douglas DC-9/MD-80, the flight cycle implementation time is 60,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.	
		Sources: 121.1107(a)(9)	
	10.	If the Certificate Holder operates McDonnell Douglas Model DC-10 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the McDonnell Douglas DC-10, the flight cycle implementation time is 30,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.	
		Sources: 121.1107(a)(10)	
	11.	If the Certificate Holder operates Lockheed Model L-1011 airplanes and the airplane has reached the flight cycle implementation time of (For all models of the Lockheed L-1011, the flight cycle implementation time is 27,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.	
		Sources: 121.1107(a)(11)	
	12.	If the Certificate Holder operates Fokker Model F28 airplanes and the airplane has reached the flight cycle implementation time of (For the Fokker F-28 Mark 1000, 2000, 3000, and 4000, the flight cycle implementation time is 60,000 flights), check at the air carrier maintenance facility or outsource provider that the approved repair assessment guidelines, and instructions and procedures are being followed.	
		Sources: 121.1107(a)(12)	
1.35		operator perform FAA approved damage-tolerance-based inspections of ritical structure?	Yes No, Explain Not Applicable Not Observable
		: Rev # 8 on 06/01/2011 Question: Flag, Supplemental, Domestic	

1.36	Did the operator ensure the maintenance program incorporated FAA Oversight Office approved Fuel Tank System (FTS) Instructions for Continued Airworthiness (ICA) that were developed in accordance with the provisions of 14 CFR part 25.1529, Appendix H, or SFAR-88?	Yes No, Explain Not Applicable Not Observable
	Note(s): Although it is likely that the operator would incorporate the Design Approval Holder (DAH) FTS ICA into their maintenance program they are not required to do so. They are only required to incorporate FAA Oversight Office approved ICA that comply with the provisions of 14 CFR part 25.1529, Appendix H, or SFAR-88. This allows the operator the option to develop their own FTS ICA or contract it out to a third party. Operator developed FTS ICA must be FAA Oversight Office approved.	
	Updated: Rev # 11 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	
1.37	Did the operator perform FAA approved Flammability Reduction instructions for continued airworthiness?	Yes No, Explain Not Applicable Not Observable
	Updated: Rev # 8 on 06/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
1.38	Did the operator ensure the maintenance program incorporated the FAA approved Electrical Wiring Interconnection Systems (EWIS) Instructions for Continued Airworthiness (ICA) that included the inspections and procedures?	Yes No, Explain Not Applicable Not Observable
	Updated: Rev # 11 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	
1.39	Following an abnormal event, did the operator conduct the maintenance manual identified inspections?	Yes No, Explain Not Observable
	Note(s): Examples of abnormal occurrences include; hard landings, over-weight landings, and drift landings resulting in excessive side/drag load; lightning strikes; severe turbulence; high brake energy stops; extreme maneuvers; speed limitations exceeded; and heavy stall buffet etc.	
	Updated: Rev # 4 on 12/03/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.40	Did the operator follow its maintenance program for the Flight Data Recorder (FDR)?	Yes No, Explain Not Observable
	Note(s): Verify a data conversion document is available and used to convert recorded values to corresponding engineering units or discrete states. Verify correlation between the values recorded by the flight data recorder and the corresponding values being measured. Verify FDR scheduled checks and data review have been accomplished to ensure recorded data is within the required range, accuracy, and recording intervals. Verify the operator maintained a record (for each airplane) that indicates if the parameters listed in 14 CFR part 121.346(c) are filtered, or not filtered. (This is required no later than October 21, 2011) Verify the operator maintained a record (for each airplane) that shows accurate	

	part 121 Verify th Verify th longer a	eatable results of any reconstructed filtered parameter listed in 14 CFR .346(c). (This is required no later than April 21, 2014) e operator retained a minimum of 25 hours of aircraft operating data. e operator retained FDR data and the recording media for 60 days (or the request of the Board or the Administrator) in the event of an or NTSB reportable occurrence.	
		: Rev # 14 on 06/23/2014 Question: Flag, Supplemental, Domestic	
	Related	Performance JTIs:	
	1.	Verify the operator maintains a document used to convert FDR recorded values to corresponding engineering units or discrete states and has an established correlation between the values being recorded by the flight data recorder and the corresponding values being measured.	
		Sources: 121.344a(d); 121.344(j); FAA Order 8900.1, Volume 4, Chapter 14, Section 8; AC 20-141, Airworthiness and Operational Approval of Digital Flight Data Recorder Systems	
	2.	Verify the operator's scheduled FDR readouts show performance levels for ranges, accuracies, and recording intervals are maintained. Check for any missing parameters, data loss, or deterioration of signals.	
		Sources: 121.344a; 121.Appendix B; 121.Appendix M; 121.344; FAA Order 8900.1, Volume 4, Chapter 14, Section 8; AC 20-141, Airworthiness and Operational Approval of Digital Flight Data Recorder Systems	
	3.	Verify the operator maintains a record to determine if any parameters listed in 14 CFR part 121.346(c) are filtered. The record must show this determination has been made for all the operator's airplanes and include any subsequent changes made to the FDR system. The record must be maintained as part of the correlation documentation required by 14 CFR part 121.344(j)(3). This action is required no later than October 20, 2011.	
		Sources: 121.346(d)(1); AC 20-141, Airworthiness and Operational Approval of Digital Flight Data Recorder Systems	
	4.	Verify the operator maintains records (for each airplane) that shows accurate and repeatable results of any reconstructed parameter listed in 14 CFR part 121.346(c). The reconstructed parameter must meet the requirements of 14 CFR part 121 Appendix B or M. The operator's reconstruction procedure must have been approved by the FAA. This action is required no later than April 21, 2014.	
		Sources: 121.346(c); 121.346(d)(4); AC 20-141, Airworthiness and Operational Approval of Digital Flight Data Recorder Systems	
1.41	operator	tallation or maintenance on an ATC transponder did records indicate the tested and inspected the integrated system to verify compliance with part 91.413(b)?	Yes No, Explain Not Observable
	Updated	: Rev # 3 on 09/15/2009	

	Kind Of Question: Flag, Supplemental, Domestic	
1.42	Did the operator maintain the Cockpit Voice Recorder (CVR)?	Yes No, Explain Not Observable
	Note(s): Verify the operator ensured audio is properly recorded and verified on each channel.	
	Verify the operator ensured datalink messages were recorded (as applicable). Verify the operator retained the recorded information for 60 days (or longer if requested by the Administrator or Board) in the event of an accident or NTSB reportable occurrence.	
	The installed CVR must retain 2 hours (minimum) of recorded information. (Required by April 7, 2012 for aircraft manufactured before April 7, 2010) InFO 10016 provides clarification of datalink communications recording requirements.	
	Updated: Rev # 8 on 06/01/2011 Kind Of Question: Flag, Supplemental, Domestic	
1.43	Were functional evaluation flights accomplished when required?	Yes No, Explain Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
1.44	Regardless of where the aircraft was located or who was performing the maintenance function, did the operator demonstrate adequate oversight to ensure their aircraft were airworthy and maintenance was accomplished in accordance with its manual?	Yes No, Explain Not Observable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.45	Did the operator use an authorized ANSP, based on the manufacturer's most current security document?	Yes No, Explain Not Applicable Not Observable
	Note(s): The authorized ANSP and latest version of the manufacturer's security document should be verified & compared to that listed in Table 1 of OpSpec	
	D301. The ANSP must be revised within thirty days after the manufacturer's aircraft security document is revised.	
	Updated: Rev # 11 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	
1.46	Did the ANSP effectively identify, assess and mitigate security threats?	Yes No, Explain Not Applicable Not Observable
	Note(s): The authorized ANSP and latest version of the manufacturer's security document should be verified & compared to that listed in Table 1 of OpSpec D301.	
	The ANSP must be revised within thirty days after the manufacturer's aircraft security document is revised.	
	Updated: Rev # 11 on 09/30/2012	

	Kind Of Question: Flag, Supplemental, Domestic	
1.47	Did the operator follow policies, procedures, instructions, and information for this element?	Yes No, Explain Not Observable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.48	Did the operator follow controls for this element?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.49	Did the records for this element comply with the instructions?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.50	Were the process measurements for this element: Effective in identifying actual or potential problems, and Did the operator identify and take corrective action for identified problems?	Yes No, Explain Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
1.51	Did the operator follow its method for evaluating the impact of changes in this process to other related processes that interface with this process?	Yes No, Explain Not Applicable Not Observable
	Updated: Rev # 13 on 09/30/2013 Kind Of Question: Flag, Supplemental, Domestic	
1.52	Did the observed interactions between personnel accomplishing interfacing processes produce the desired result?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated: Rev # 13 on 09/30/2013 Kind Of Question: Flag, Supplemental, Domestic	
	EPI SECTION 1 - PERFORMANCE OBSERVABLES Drop-Down Menu	
1.	Personnel.	
2.	Tools and Equipment.	
3.	Technical Data.	
4. 5.	Policies, procedures, instructions, or information. Materials.	
6.	Facilities.	
l 6.	Facilities.	

7.

8.

9.

10.

11.

Controls.

Interfaces.

Other.

Process Measures.

Desired Outcome.

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES

Objective:

Answers to questions in this section address the responsibility and authority of the people who manage this process. They will help determine if there is a qualified and knowledgeable person who:

- Is responsible for the process
- Is answerable for the quality of the process
- Has the authority to establish and modify the process.

Note: The person with the authority may or may not be the person with the responsibility.

Tasl	ks
	The inspector shall accomplish the following tasks:
1	Identify the person who has overall responsibility for the processes associated with this element.
2	Identify the person who has overall authority for the processes associated with this element.
	Note: If there have been no major changes in key personnel or the program since the last SAI or EPI was accomplished, then only answer questions 1 and 2 below, and select "No Change" (N/C) for the remaining questions. If changes have occurred that affect the responsibility or authority attributes for this element, then accomplish all tasks and answer all questions.
3	Review the duties and responsibilities for the person(s) who manage the processes associated with this element.
4	Review the appropriate organizational chart.
5	Discuss the processes associated with this element with the management personnel identified in tasks 1 and 2.
6	Review the qualifications and work experience of the management personnel identified in tasks 1 & 2.

Ques	tions	
2.1	Is the identified person who is responsible for the quality of the processes associated with this element actively filling that position?	☐ Yes ☐ No, Explain ☐ Not Observable
	Updated: Rev # 5 on 03/03/2010	
	Kind Of Question: Flag, Supplemental, Domestic	
2.2	Is the identified person who has authority to establish and modify the operator's policies, procedures, instructions and information for the processes associated with this element actively filling that position?	Yes No, Explain Not Observable
	Updated: Rev # 5 on 03/03/2010	
	Kind Of Question: Flag, Supplemental, Domestic	
2.3	Does the responsible person know that he/she has responsibility for the processes associated with this element?	Yes No, Explain No Change
	Updated: Rev # 5 on 03/03/2010	☐ Not Observable

	Kind Of Question: Flag, Supplemental, Domestic	
2.4	Does the person with authority know that he/she has authority for the processes associated with this element?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
2.5	Does the person with responsibility for the processes associated with this element meet the qualification and work experience standards?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
2.6	Does the person with authority to establish and modify the processes associated with this element meet the qualification and work experience standards?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
2.7	Does the person with responsibility understand the controls, process measurements, and interfaces associated with this element?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	I NOT OBSETVABLE
2.8	Does the person with authority understand the controls, process measurements, and interfaces associated with this element?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
2.9	Does the person with responsibility know who has authority to establish and modify the processes associated with this element?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	I NOT OBSETVABLE
2.10	Does the person with authority know who has the responsibility for the processes associated with this element?	Yes No, Explain No Change Not Observable
	Updated: Rev # 5 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	- I not observable
	EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSER\ Drop-Down Menu	/ABLES
1.	Assignment of responsibility.	

	EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES
	Drop-Down Menu
1.	Assignment of responsibility.
2.	Assignment of authority.
3.	Does not understand policies, procedures, instructions, or information.
4.	Does not understand controls.
5.	Does not understand process measurements.
6.	Does not understand interfaces.

7.	Span of control.
8.	Position vacant.
9.	Other.